In the claims:

- 1. (canceled)
- 2. (currently amended) A thermally conductive polymer composition comprising:

a polymer matrix;

graphitized carbon fibers as a thermally conductive filler,

wherein the fibers are obtained by spinning, infusibilizing and carbonizing the mesophase pitch before pulverizing,

wherein the graphitized carbon fibers have a density of 2.20-2.26g/cm³ and a thermal conductivity in an axial direction of the fiber of at least 400 W/mK.

- 3. (original) The composition in accordance with claim 2, wherein the graphitized carbon fibers have a diameter of $520\,\mu m$.
- 4. (original) The composition in accordance with claim 2 wherein the graphitized carbon fibers have an average particle size of $10\text{--}500\,\mu\text{m}$.
- 5. (canceled)
- 6. (canceled)

- 7. (original) The composition in accordance with claim 2, wherein the polymer matrix is selected from the group consisting of thermoplastic resin, thermoplastic elastomer, and thermosetting resin, and vulcanized rubber.
- 8. (original) The composition in accordance with claim 2, wherein the carbonization is conducted substantially at 500900 degrees C in an inert gas.
- 9. (canceled)
- 10. (original) The composition in accordance with claim 2 further comprising a thermally conductive filler that is electrically insulative.
- 11. (original) The composition in accordance with claim 10, wherein the thermally conductive filler is selected from the group consisting of aluminum oxide, magnesium oxide, boron nitride, aluminum nitride, silicon nitride, silicon carbide and aluminum hydroxide.
- 12. (original) The composition in accordance with claim 2, wherein the composition is grease.
- 13. (original) The composition in accordance with claim 2, wherein

the composition is an adhesive.

14. (currently amended) A thermally conductive molded article made by molding a thermally conductive polymer composition into a predetermined shape, the composition comprising:

a polymer matrix;

graphitized carbon fibers as a thermally conductive filler,
wherein the fibers are obtained by spinning,
infusibilizing and carbonizing the mesophase pitch
before pulverizing,

wherein the graphitized carbon fibers have a density of 2.20-2.26g/cm³ and a thermal conductivity in an axial direction of the fiber of at least 400 W/mK.

- 15. (original) The molded article in accordance with claim 14, wherein the molded article is a sheet.
- 16. (original) The molded article in accordance with claim 14, wherein the molded article is a housing.
- 17. (currently amended) A method for producing graphitized carbon fibers comprising:

spinning a mesophase pitch into spun fibers; infusibilizing the spun fibers to form infusibilized fibers;

carbonizing the infusibilized fibers to form carbonized

fibers;

pulverizing the carbonized fibers to form pulverized fibers; and

graphatizing the pulverized fibers to form graphitized carbon fibers,

wherein the graphitized carbon fibers have a density of 2.20-2.26g/cm³ and a thermal conductivity in an axial direction of the fiber of at least 400 W/mK.

18. (original) The method in accordance with claim 17, wherein the carbonization is conducted substantially at 500 - 900 degrees C in an inert gas.